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The following is late news about Amateur Radio for Radio Amateurs as prepared from NEWSLINE RADIO scripts by the staff of the AMATEUR RADIO NEWSLINE, INC. -- formerly the WESTLINK RADIO NETWORK. The electronic version of newslines is posted on this CBBS twice monthly. For current information updates, please call (213) 462-0008, (407) 259-4479, (708) 289-0423, (513) 275-9991, or (718) 353-2801. For the latest breaking info call the Instant Update Line at (805) 296-2407. To provide information please call (805) 296-7180. This line answers automatically and will accept up to 30 minutes of material.

Check with your local amateur radio club to see if NEWSLINE can be heard weekly on the air in your area.

Articles may be reproduced if printed in their entirety and credit is given to AMATEUR RADIO NEWSLINE as being the source.

For further information about the AMATEUR RADIO NEWSLINE, please write to us with an SASE at P.O. Box 463, Pasadena, CA 91102.

Thank You
NEWSLINE

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Some of the hams of NEWSLINE RADIO...

WA6ITF WB6MQV WB6FDF K6DUE W6RCL N6AHU N6AWE N6TCQ K6PGX N6PNY
KU8R N8DTN W9JUV KC9RP K9XI KB5KCH KC5UD KC0HF G8AUU WD0AKO DJ0QN
and many others in the United States and around the globe!!!

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* * * * C L O S E D C I R C U I T A D V I S O R Y * * * *

* The following is a closed circuit advisory and NOT for

* retransmission on amateur radio. According to Dr. Norm

* Chalfin, K6PGX, Newsline is once again very broke. Simply

* said, we need the assistance of every listener who

* appreciates Newsline to help to keep it on the air. The

* Newsline Support Fund is separate from the service itself

* and exists for the purpose of channeling donations directly

* to the those providing services to the Newsline

* organization.

* The address for the Newsline Support Fund is Post Office

* Box number 463, Pasadena, California 91102. As always, we

* thank you for your support.

* * * * *

REPEATER FINED

A repeater owner has been fined five thousand dollars because the FCC says that his system was heard transmitting on a frequency in an aeronautical communications band. The case involves William A. Krause, WA2HDE of Ceder Grove, New Jersey. The FCC says that on August the 30th, its New York City Field Office received a complaint from the FAA about a signal on 243 Mhz that had appeared on receivers at two airports over the previous five days.

The FCC says that the next day it used its direction finding equipment to trace the signal to a ham radio repeater installed atop a building at 2 Penn Plaza in Manhattan, New York. Subsequent investigation by the FCC determined that the repeater was being operated by WA2HDE. The commission says that the repeater transmitter was either operating off of its coordinated frequency of 224.66 MHz or that it had developed a high level spurious emission at 243 Mhz.

According to the commission, 243 MHz is designated as the international emergency and distress channel to be used by radio beacons in the Marine and Aeronautical Radio Service. 243 MHz is automatically monitored by a set of low earth orbiting satellites called Sarsat Cospas. These birds are routinely used in search and rescue operations and are maintained as a joint venture between the United States, Canada and Russia.

The FCC contends that during the time that Krause repeater transmitter was operating on 243 MHz it had the potential to block emergency radio communications over a very large geographic area. Because of this the FCC says it took the action to issue the five thousand dollar fine as a part of its continuing effort

to preserve the integrity of this important aeronautical radio system hat they say pilots depend on for safety while in flight. WA2HDE was given thirty days to file an appeal.

TV STATIONS FINED FOR KID ADS

The Federal Communications Commission has also notified four television stations they will be fined for exceeding limits on commercials aired during children's shows. A 1990 law forbids stations from broadcasting more than ten and one half minutes of commercial material an hour during children's programming on weekends, or more than twelve minutes per hour on weekdays.

According to the published news reports, the agency issued a Notice of Apparent Liability to Monetary Forfeiture against the licensee of KPLR-TV in St Louis and said it intends to impose a \$30,000 fine. KXRM-TV in Colorado Springs will be fined \$25,000, while the licensee for KTTM-TV in Huron, S.D. and KTTW-TV in Sioux Falls, S.D. will be fined \$27,500.

The license holders have the customary 30 days to respond to the violation notices but it may be hard for any of them to find an excuse for their actions. It seems that the stations themselves admitted to the violations when they supplied the FCC with the data required for license renewals.

SENATE & HOUSE SUPPORT GROWS

Ninety seven members of the United States House of Representatives and fifteen US Senators have now become co-sponsors of the Amateur Radio Service Joint Resolution which was introduced into both houses of congress last May. At its meeting last January, the ARRL's Board of Directors paved the way for the joint resolution with a resolution sponsored by New England Division Director Bill Burden, WB1BRE. Based on the Burden motion, the Board voted to instruct its Washington representatives to seek formal recognition from the 103rd congress of the role played by the Amateur Radio Service. This, as a national resource in preparation of and relief from disasters and in helping to foster technical progress in electronics.

Representative Mike Kreidler of Washington State was an original co-sponsor of the House version of the resolution and he has some strong words of support for the Amateur Radio service. According to Kreidler, it is about time for Congress to recognize the achievements of our nations hams. He says that with the service approaching 600,000 licensed radio amateurs in the United States, he is certain that every member of the house has had

similarly favorable experiences with the amateur community and will also support this resolution. So far, 97 of his fellow congressmen and women have followed his lead.

ARRL ELECTIONS

While there are elections taking place in several ARRL divisions this fall, none is more contested than the race for the seat of Director for the Southeastern Division. There, an incumbent with more than a decade in office has a lot of competition at the ballot box. Three amateurs are challenging incumbent Frank Butler, W4RH, of Florida.

Amateurs in the Southeastern Division have a choice: Go with a familiar name -- or choose change. Incumbent Frank Butler has held the office for 13 years. Butler sez he's always available to assist League members with problems. But others say it's time for a new face to lead the Division. Georgia resident David Shiplett, AC4MU, sez the League needs to get back in step with the amateur community. Shiplett is joined in the race by Rudy Hubbard, WA4PUP, currently ARRL's Section Manager for Northern Florida. Hubbard has heavy involvement in emergency communications. Also in the race is Florida resident Alan Page, KE4WO. Page sez he'll keep amateur radio moving in an upward direction. November 19th is the day all 4 candidates anxiously await -- that's when the ballots will be counted.

In addition to the Southeast, ARRL elections are being held in the Delta, Dakota, Midwest and Pacific Divisions as well. The Director's elected later this month will serve a 2-year term that starts January first of 1994.

SAREX - STS 58

STS-58, the latest in the series of Shuttle Amateur Radio EXperiments called SAREX, was a tremendous success. The fourth and final flight of 1993 racked up near-perfect contacts with 17 school groups ... many reporting full quieting contacts with the spacecraft from horizon to horizon. An outstanding one took place on October 21st, when the Lycee Gaston Febus school, in Pau, France, had a telebridge contact with the astronaut. Jean Marc Dumont, the French school coordinator, reports that over 10 thousand students in France listened to the conversation through a national repeater!

Hundreds of school children in the United States were thrilled by direct talks with the STS-58 astronauts and thousands more listened in.

The general ham population also had a great time. This was

the longest shuttle mission to date ... 14 days ... and the crew dedicated much of their second week in orbit to general QSOs ... several hundred of them ... and packet, with well over 800 packet contacts reported at this time. During the flight, Bill McArthur, KC5ACR, radioed back ... "Thanks for all the great QSO's. KC5AXA ... Marty Fettman ... KC5CKM, Rick Searfoss, and I love them. We're doing human metabolic and cardiovascular experiments in the lab today."

The SAREX Working Group, in charge of the flight, said "This was a testament to the outstanding support and preparation by the astronauts on-orbit and the SAREX team on the ground and in Mission Control."

QSL information for STS-58 ... send cards to ARRL, STS-58 QSL, 225 Main Street, Newington, Connecticut 06111. Allow six to 10 months for a reply.

SAREX 10TH ANNIVERSARY

This marks the 12th time SAREX, the Shuttle Amateur Radio Experiment, has flown ... and it's the last SAREX mission for this year. Next up, in December, will be a shuttle flight dedicated entirely to the task of repairing the Hubble Telescope.

Next year, two SAREX flights are scheduled at this writing. STS-60, in January, with astronaut Charles Bolden and Cosmonaut Sergei Krikalev ... and STS-59, in April, with Jay Apt and Linda Godwin.

If you would like to know more about the history of SAREX, there's a story in the November issue of QST magazine ... commemorating the tenth anniversary. That's right, Owen Garriott led the parade in November, 1983!

INDIA QUAKE

News stories are applauding the work of ham radio operators relief efforts to the survivors of the recent earthquake in India. The press services have reported that twenty six ham radio operators have set up a network to help coordinate relief efforts to the 120,000 people that were left homeless by the September 30th trembler.

According to Sirama Suri VU2MY, in rural India telephones can be as much as 25 miles away. There he says, it has been Amateur Radio operators that have been the ones who have put together a communications network to aid these earthquake victims.

DXCC UPDATE

In DX, the ARRL's DXCC desk says that it has received 1330 applications for new awards and endorsements. That's a mega total of 95,212 individual QSL cards which make it the largest number of cards received in any single month since September of 1990.

BURUNDI

Famed DXer Baldur Drobnica, DJ6SI, is reportedly active as 9U5DX. He was heard on 24.892 MHz at 14:13 UTC, 14.025 MHz at 20:50 UTC and 18.081 MHz at 20:57 UTC. The length of his stay in Burundi is unknown. QSL direct to DJ6SI at his Callbook address.

THP LEAVES U.S. MARKET

The worsening international monetary condition has now directly affected Amateur Radio. This, with the announcement by Tokyo Hy-Power Labs Inc. that it will terminate export sales from Japan to the United States.

Tokyo Hy-Power manufactures a wide variety of ham radio related equipment including six meter transverters, 2 meter and 70 centimeter power amplifiers and the world's only tri band hand held radio. A hand held that operates on both HF and VHF.

For the past several years Tokyo Hy-Power has been represented in the United States by Orion Business International of Fresno, California. According to a FAX from Loren Pleet of Orion, the President of Tokyo Hy-Power Labs cited the abnormally high Dollar to Yen exchange rate and the severely depressed economy of Japan as the major factors in reaching this decision. Pleet said that Orion Business International was shocked when it heard of the decision by Tokyo Hy-Power to abandon the United States market. He says that despite Orion's efforts to try and continue the flow of equipment from Tokyo Hy-Power Labs the decision made in Japan appears to be irreversible.

Tokyo Hy-Power was never one of the heavyweights in the US marketing arena, but it is far from a tiny operation. In fact, its products were well known worldwide before they were ever seen by hams in the United States. Even though the United States is considered the strongest amateur equipment market in the world, the dollar to yen exchange rate is making it harder and harder for all Pacific Rim nations to turn a profit selling their goods to us.

That's all from the Amateur Radio Newsline. You can write to us at Post Office Box 463 in Pasadena, California 91102.

* * * Newsline Copyright 1993 all rights are reserved. * * *

Date: 8 Nov 93 14:24:10 GMT
From: news-mail-gateway@ucsd.edu
Subject: BAUD vs. BAUDS
To: info-hams@ucsd.edu

The singular for DATA is DATUM, and in fact according to Merriam-Webster, datums is acceptable as plural.

Regarding baud here is the definition from the New Penguin Dictionary of Electronics:

"baud A unit of telegraph signalling speed equal to one unit element per second. Thus if the duration of the unit element is 1/n seconds then the speed of transmission of successive signals is n bauds."

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Worcester, MA 01655	

Date: Sun, 7 Nov 1993 23:53:30 GMT
From: concert!news-feed-2.peachnet.edu!umn.edu!msc.edu!cdsmaill!
bml4380.cpg.cdc.com!molson@decwrl.dec.com
Subject: Kenwood TM-742 remote control?
To: info-hams@ucsd.edu

I have been told that the Kenwood TM-742 can be used for remote control operations. However, the manual that I have for mine only details the remote control that is accessed by the DTMF microphone. Is there a way to enable remote control from a remote transciever? I've looked at the "mod" BBS's that I know about but information on the 742 is scarce. I have a feeling that there is an undocumented function sequence that enables this, but I have been unable so far

to find it. Anyone have information about this?

Thanks in advance!

Mark Olson AA0MH

Date: Sun, 7 Nov 1993 20:13:02 GMT
From: pacbell.com!rtech!amdahl!thunder!ikluft@network.ucsd.edu
Subject: rec.radio.amateur.misc Frequently Asked Questions (Part 1 of 3)
To: info-hams@ucsd.edu

Posted-By: auto-faq 3.0
Archive-name: radio/ham-radio/faq/part1
Revision: 3.0 1993/11/07 18:38:38

Rec.radio.amateur.misc Frequently Asked Questions
Part 1 - Introduction to the FAQ and Amateur Radio

This is a regular posting of frequently-asked questions (FAQ) about Amateur Radio, also known as Ham Radio. It is intended to summarize some common questions on the rec.radio.amateur.misc newsgroup and Info-Hams mail list as well as to help beginners get started.

Please provide a copy of the FAQ to any new or soon-to-be Hams you know.

Regular FAQ postings can help save network bandwidth and maintain a good signal-to-noise ratio in the newsgroup. However, they can't do it alone - you, the reader, have to use them. If you are a new user, please print and review the FAQ articles and look at the instructions in the news.announce.newusers newsgroup before posting any articles. If you are an experienced user, please help by refraining from answering frequently-asked questions on the newsgroup if they are already answered by the FAQ articles. Instead, send e-mail to the user who asked the question. (It will be helpful if you include the part of the FAQ that answers their question, but not the whole thing.)

The FAQ cannot always prevent people from posting repetitive questions. But even if hundreds of questions get posted, it saves you from having to answer them hundreds of times. Also, a friendly pointer to the FAQ in your first answer can help that person refer to the FAQ in the future. That is when we can begin to get a real savings of network bandwidth.

To reduce the size of each article, the FAQ information is posted in 3 parts:
Part 1 - Introduction to the FAQ and Amateur Radio
Part 2 - Amateur Radio Organizations, Services, and Information Sources
Part 3 - Amateur Radio Advanced and Technical Questions

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--Rec.radio.amateur.misc Frequently-asked Questions-----Part 1--

** Introduction to the FAQ

* How to Contribute to the FAQ Articles

We accept suggestions from the Amateur Radio community. Please consider that all new contributions need to be SHORT and concise in order to be included. If a contribution is too long, the FAQ editors can help you find a more appropriate FTP archive or mail server for your article.

We always accept corrections. Please allow some time (often not the next issue of the FAQ) because the FAQ maintainers do this as volunteers so each must give higher priority to their employers.

Send correspondence to hamradio-faq@amdahl.com so that it will reach all the FAQ coordinators: (listed in alphabetical order)

Ed Hare	KA1CV	ehare@arrl.org	(Newington, CT, USA)
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* Acknowledgements

All questions listed as modified "pre-4/92" are entirely Diana Carlson KC1SP's work or her editing of a contributor's work. Diana established this FAQ and credit is due to her for founding this project.

Thanks to Devon Bowen KA2NRC for accepting this FAQ in e-mail every month to keep the FTP archive at <ftp.cs.buffalo.edu> up-to-date.

* Notes on "Netiquette"

The rec.radio.amateur.misc newsgroup and Info-Hams mail list have a large daily volume of traffic. They can operate more efficiently if the following netiquette guidelines are followed. Please take them seriously.

- * If you are new to UseNet, the introductory articles in news.announce.newusers are required reading. Go to that newsgroup now. Definitely, read the instructions there before posting anything. Other rec.radio.amateur.* readers will appreciate it!
- * Pick the right newsgroup. Use only the most specific newsgroup for your subject. For example, a question about a homebrew antenna only needs to be posted to rec.radio.amateur.antenna. Also, don't post to rec.radio.amateur.misc when the subject can go in another rec.radio.amateur.* newsgroup. So, when there is a more specific newsgroup, that's the one you want.
- * When posting a followup article, ALWAYS try to minimize the number of lines of quoted material from the original article.
- * As a general rule when you try to determine whether to reply to someone by e-mail or with a followup article, remember to "praise in public, criticize in private." It's OK to disagree technically but

be careful not to attack the person with whom you disagree. Also, be careful with your use of the word "you" when posting a follow-up article. Many unnecessary flame wars have started that way.

- * Use a descriptive subject. For example, a message subject of "Ham Radio" tells the reader NOTHING about the contents of your article since the whole newsgroup is about Ham Radio. Other examples of subjects which are so broad that they become useless could include, "Help," "A Question," "Antennas," or "Frequencies." Maybe "Books on Antennas?" or "Where can I find Repeater Frequencies?" would be better, for example. Remember, in a busy newsgroup a lot of users decide which articles to read from the subject line alone. If you post, don't deprive yourself of an audience!
- * Before answering a question, check if the FAQ adequately answers it or if someone else already answered it. If you have more to add, make sure to reference either the FAQ or the related articles.
- * If a user posts a question which is directly answered by the FAQ, there is no need to post an answer - the information is already available on the newsgroup. Instead, just send an e-mail message which politely explains where to find the FAQ. They will probably appreciate it if you include the answer to their question. (Don't send a "nastygram" - that would just discourage future participation.)
- * Pay attention to the size of your audience - use the "Distribution:" header. If you leave it blank, your message will go to every civilized country in the world and occupy disk space in all news systems in all those places. If that's what you intend, that's fine but make sure your article is relevant outside your country. (In particular, Hams should already know there is more to the world than just their own country.)
- * If you have an item for sale, please limit the distribution area so that, for example, an article about a radio for sale in New Jersey won't get to California or Europe. If you wish, you may cross-post your for-sale article to rec.radio.swap.
- * Software sources should be posted to either alt.sources, comp.sources.misc, or comp.sources.* for a specific machine type. Software binaries should be posted to the appropriate subgroup of comp.binaries.

**** What is Amateur Radio?**

Amateur Radio is a non-commercial radio communication service whose primary aims are public service, technical training and experimentation, and communication between private persons. Amateur Radio operators are commonly called hams. Hams often communicate with each other recreationally but also provide communications for others at public events or in times of emergency or disaster.

**** Who can become a ham?**

The answer to this question differs in every country.

The answer for the USA is listed below. If your country has a newsgroup specifically for it (i.e. UK, Australia, Germany) the most accurate answers can be found there. See Part 2 for the list of region-specific newsgroups.

If that doesn't help, the American Radio Relay League (ARRL) may be able to help because they communicate with similar organizations in other countries, probably including yours. They can be reached by electronic mail or surface mail (see Part 2.)

In the USA, anyone who is not a representative of a foreign government can be an Amateur Radio operator. There are tests that you must pass to get a license, however the tests are not insurmountable. On that general level, the requirements are probably similar in almost every country.

For more information on becoming a Ham in the USA, the ARRL has a toll-free number where you can request information: 1-800-32-NEW-HAM (don't worry about the number being one digit too long - the phone system ignores it.) Other information can also be obtained from the ARRL e-mail information server in the file called PROSPECT. Details on the server are in Part 2.

**** Where can I locate information and books on Amateur Radio?**
Your local Radio Shack sells some ham radios and Amateur Radio license books. Books can also be obtained through the mail from ham radio organizations, such as ARRL in Newington, CT (203-666-1541) and W5YI in Dallas, TX (1-800-669-9594). There may be one or two ham radio stores in the local area (ie, within 50 miles). Try looking in the Yellow Pages under Radio Communications.

For the Novice license, get a Novice License manual, plus 5-word-per-minute Morse code tapes, costing around \$25. For the Technician license, get a combined Novice and Technician License manual, and an FCC Rules manual, costing around \$32. The FCC Rules manual is a good idea for Novice also, but not necessary, since the Novice License manual contains all the FCC Rules that are required for the Novice License.

The ARRL Education Activities Department has several programs to help amateurs (or prospective amateurs) to get started. Ask for a "New prospect package" available free of charge, from ARRL HQ, Educational Activities Department, 225 Main St, Newington, CT 06111.

Information on Ham Radio can also be obtained with your computer. Part 2 of this FAQ contains a significant amount of material on

that subject.

**** How much does it cost?**

To take the tests for any class of amateur radio license, there is a small charge (around \$5-\$6 currently) to cover copying costs and running the testing sessions. (Due to changes in 1993, Novice tests are under same procedures as the others.) The cost of a radio is really dependent on what you want to do. You can make your own radio and antenna for under \$150. You can buy a used single-band radio for \$150-\$300. Or you can buy a new multi-band multi-mode radio with all the doodads for \$300-\$3000. I'd suggest you learn more about ham radio, talk to local hams, find out what you want to do with ham radio first.

**** Where can I take the tests?**

The Novice tests Used to be given by any two qualified hams of General class license or above. Now all the license tests are given by three qualified Volunteer Examiners (VEs) who volunteer their time.

To locate an ARRL testing session in your area, you can contact ARRL at 203-666-1541 x282.

See also the section "Where can I find VE sessions in my local area?" in Part 2 because more information is available via UseNet.

**** What are the tests like?**

First off, come prepared to VE sessions. Bring: TWO forms of ID, one of which has a picture on it; a calculator (if necessary); a pen and two pencils; the applicable examination fee (around \$5-\$6 for 1993); the original AND a copy of your current Amateur Radio license (if you have one); the original AND a copy of any CSCEs for tests you've already passed (if you have any).

Each of the written tests (Novice, Technician, General, Advanced, and Extra) are generally a multiple choice test of approximately one-tenth of the question pool. For example, if the question pool is approximately 300 questions, then the test will be a 30-question test. You need to get 75% correct to pass. Note that they truncate to determine the correct number of questions. That means for a 30 question test, you need to get 22 right, which is actually only 73.3%.

Once you've paid the small fee for Technician-Extra tests, it costs no extra to take another test, so I'd suggest you keep taking the next more advanced test until you fail. If you pass the written but not the Morse code (or vice versa) for a specific class license, you have up to one year to take the other test before you would have to retake the written test again. Note that some VEs will not allow you to take the written test unless you've first taken the Morse code

test.

The Morse code test is a receiving test only. The test run 5 to 7 minutes. After the test, you are given a 10-question multiple-choice or fill-in-the-blank test. Passing grade is 7 or more. If you fail the 10-question test, the examiner team will examine your copy sheet to see if you have 1 minute of solid copy with no errors. For 5 wpm, that's 25 characters, for 13 wpm, that's 65 characters, for 20 wpm, that's 100 characters. If they can find 1 minute solid copy, you've still passed.

Hints on Morse code tests: Generally, it will be a standard QSO (conversation), and it MUST contain at least one of each of the following:

26 letters A-Z, 10 numbers 0-9, comma (,), period (.), slant or slash (/), question mark (?), double dash prosign (BT), end of message prosign (AR), end of contact prosign (SK).

The letters count as one character, all others count as two characters. There are a couple other prosigns which are worth knowing, but will not be on the test, like "I'm done talking, next" is K, "I'm done talking, back to you" is KN, "Please wait" is AS.

** What can I do with a ham radio license?

There are so many things, it's a difficult question to answer, but here's some ideas:

- * Talk to people in foreign countries.
- * Talk to people (both local and far away) on your drive to work.
- * Help in emergencies by providing communications.
- * Provide communications in parades or walkathons.
- * Help other people become hams.
- * Hook your computer to your radio and communicate by computers.
- * Collect QSL cards (cards from other hams) from all over the United States and foreign countries and receive awards.
- * Participate in contests or Field Day events.
- * Provide radio services to your local Civil Defense organization thru ARES (Amateur Radio Emergency Service) or RACES (Radio Amateur Civil Emergency Service).
- * Aid members of the US military by joining MARS (Military Affiliate Radio System).
- * Participate in transmitter hunt games and maybe build your own direction-finding equipment.
- * Have someone to talk to on those sleepless nights at home.
- * Receive weather pictures via satellites.
- * Build radios, antennas, learn some electronics and radio theory.
- * Talk to astronauts in space, or use the moon to bounce signals back to people on the Earth.
- * Experiment with Amateur TV (ATV), Slow-Scan TV (SSTV), or send still-frame pictures by facsimile.

* Experiment with amateur satellite communications.

** What can't I do with an Amateur Radio license?

The most important thing you can't do is transact business of any kind over ham radio. Interference to other hams or services, as well as obscene, profane or indecent language is not tolerated and is illegal. Music and broadcasting are not allowed on ham radio. Some personal conversations may not be appropriate to Amateur Radio. Do you really want the whole world to hear about Aunt Mabel's hemorrhoids?

** I'm interested, who will help me?

There are hams who are willing to become "Elmers" (mentors, helpers) in your local area. Look around and ask local hams. Search out local radio clubs. As well, some people have volunteered to be an Elmer over the Usenet. A list of UseNet Elmers and their e-mail addresses is posted to the newsgroup monthly. If anyone wants to be an Elmer, send e-mail to
elmers-request@unomaha.edu

There is also a lot to be said for exploring on your own. Take a look around the FTP archives and e-mail servers listed in Part 2. There's so much out there on UseNet, you'll find plenty of things you're interested in.

** Should I build my own equipment or antenna?

[see also rec.radio.amateur.homebrew and rec.radio.amateur.antenna]
"Homebrewing" is a fun and educational part of ham radio. It is a thrill to build your own transmitter and put it on the air. However, building your own receiver can be quite complicated; if you don't have electronics experience, you may want to buy a receiver instead. Most homebrew transmitters are QRP (transmit very low power). That's fine for an experienced ham with a very good antenna, but a Novice ham will just get frustrated. Your first rig, therefore should NOT be a homebrew.

Antennas can be much simpler projects than the transceiver, though some types are also quite involved. Most hams build their own antennas for base station use and buy antennas for mobile (car) use. Most beginner ham books describe how to build different types of antennas. Order of difficulty, from easiest to more difficult, for some common antennas are: wire dipole, Zepp, Yagi, Quad, and Log-Periodic. Books from many sources, including ARRL and several Hams, discuss antennas in depth.

When building or even understanding antennas, it is good to know the relationship between the antenna element length and the frequency or wavelength it is designed for. An antenna performs best at multiples

of 1/4 of that wavelength, though 5/8 wave also has beneficial qualities. The wavelength is related to the frequency with the following formula:

wavelength (in meters) = 300 / frequency (in megahertz)

You do not need a huge antenna or tower like ones you may see around your neighborhood. Large beam antennas and 40-foot towers are very expensive. As a beginner, a simple dipole antenna is perfectly adequate. As you gain experience (and money :-), you may want to invest in something bigger.

If you can afford new rigs and antennas, there are many mail order stores that advertise in ham radio magazines. If you want to buy a used rig, the best place is at a "hamfest" (ham flea market). You should take along an experienced ham, since some of the used equipment may be inoperative, overpriced or poor quality. You can also answer ads in ham magazines or posted at ham radio stores, although often, by the time you call, the equipment has already been sold.

Date: 5 Nov 93 19:33:05 -0800
From: morrow.stanford.edu!ssrl01.slac.stanford.edu!haggart@decwrl.dec.com
Subject: Stolen ICOM 2-meter
To: info-hams@ucsd.edu

A 2-meter HT was stolen from my car last weekend in Sunnyvale, California. It is distinctive in that it has a no-name 12V battery that makes this normally tiny radio very tall. (The thieves left behind the small plastic cover that goes on the bottom of the radio when the external battery pack is removed.)

ICOM 2 SAT, serial number 4220

If someone tries to sell you this radio, please contact me or the Sunnyvale Police.

Thank you!

Craig Haggart, KC6VHO
(408)739-1904

posted to:
rec.radio.amateur.equipment
rec.radio.amateur.misc
rec.radio.scanner
rec.radio.swap

End of Info-Hams Digest V93 #1322
